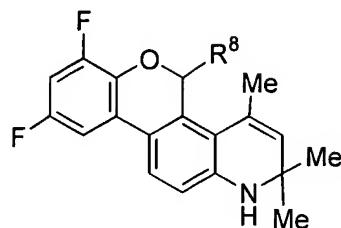


**Amendments to the claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

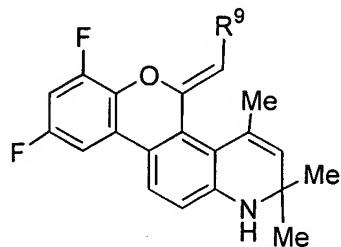
**Listing of Claims:**

1. (original) A compound of the formula:



(I)

or



(II)

wherein:

$R^8$  is selected from the group of  $C_1-C_{12}$  alkyl,  $C_1-C_{12}$  heteroalkyl,  $C_1-C_{12}$  haloalkyl,  $C_2-C_{12}$  alkenyl,  $C_2-C_{12}$  heteroalkenyl,  $C_2-C_{12}$  haloalkenyl,  $C_2-C_{12}$  alkynyl,  $C_2-C_{12}$  heteroalkynyl,  $C_2-C_{12}$  haloalkynyl, aryl and heteroaryl, optionally substituted with one or more substituents independently selected from the group of hydrogen,  $C_1-C_4$  alkyl, F, Cl, Br, I, CN,  $NO_2$ ,  $NH_2$ ,  $NHCH_3$ ,  $N(CH_3)_2$ , SH,  $SCH_3$ , OH,  $OCH_3$ ,  $OCF_3$ ,  $CF_3$ ,  $C(O)CH_3$ ,  $CO_2CH_3$ ,  $C(O)NH_2$ ,  $OR^{10}$ ,  $SR^{10}$ , and  $NR^{10}R^{11}$ ;

R<sup>9</sup> is selected from the group of hydrogen, F, Cl, Br, I, CN, C<sub>1</sub>–C<sub>8</sub> alkyl, C<sub>1</sub>–C<sub>8</sub> heteroalkyl, C<sub>1</sub>–C<sub>8</sub> haloalkyl, C<sub>2</sub>–C<sub>8</sub> alkenyl or cycloalkenyl, C<sub>2</sub>–C<sub>8</sub> heteroalkenyl, C<sub>2</sub>–C<sub>8</sub> haloalkenyl, C<sub>2</sub>–C<sub>8</sub> alkynyl, C<sub>2</sub>–C<sub>8</sub> heteroalkynyl, C<sub>2</sub>–C<sub>8</sub> haloalkynyl, aryl and heteroaryl, optionally substituted with one or more substituents independently selected from the group of hydrogen, C<sub>1</sub>–C<sub>4</sub> alkyl, F, Cl, Br, I, CN, NO<sub>2</sub>, NH<sub>2</sub>, NHCH<sub>3</sub>, N(CH<sub>3</sub>)<sub>2</sub>, SH, SCH<sub>3</sub>, OH, OCH<sub>3</sub>, OCF<sub>3</sub>, CF<sub>3</sub>, C(O)CH<sub>3</sub>, CO<sub>2</sub>CH<sub>3</sub>, C(O)NH<sub>2</sub>, OR<sup>10</sup>, SR<sup>10</sup>, and NR<sup>10</sup>R<sup>11</sup>;

R<sup>10</sup> and R<sup>11</sup> each independently is hydrogen, or C<sub>1</sub>–C<sub>4</sub> alkyl;

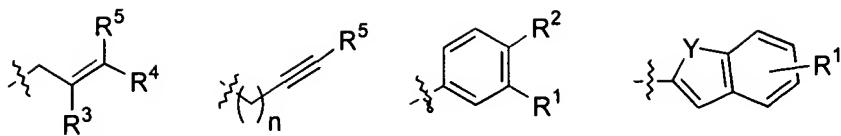
or a pharmaceutically acceptable salt or prodrug thereof.

2. (original) A compound according to claim 1, wherein R<sup>8</sup> is selected from the group of C<sub>1</sub>–C<sub>8</sub> alkyl, C<sub>1</sub>–C<sub>8</sub> heteroalkyl, C<sub>1</sub>–C<sub>8</sub> haloalkyl, C<sub>2</sub>–C<sub>8</sub> alkenyl, C<sub>2</sub>–C<sub>8</sub> heteroalkenyl, C<sub>2</sub>–C<sub>8</sub> haloalkenyl, C<sub>2</sub>–C<sub>8</sub> alkynyl, C<sub>2</sub>–C<sub>8</sub> heteroalkynyl, C<sub>2</sub>–C<sub>8</sub> haloalkynyl, aryl and heteroaryl, optionally substituted with one or more substituents independently selected from the group of hydrogen, C<sub>1</sub>–C<sub>4</sub> alkyl, F, Cl, Br, I, CN, NO<sub>2</sub>, NH<sub>2</sub>, NHCH<sub>3</sub>, N(CH<sub>3</sub>)<sub>2</sub>, SH, SCH<sub>3</sub>, OH, OCH<sub>3</sub>, OCF<sub>3</sub>, CF<sub>3</sub>, C(O)CH<sub>3</sub>, CO<sub>2</sub>CH<sub>3</sub>, C(O)NH<sub>2</sub>, OR<sup>10</sup>, SR<sup>10</sup>, and NR<sup>10</sup>R<sup>11</sup>.

3. (original) A compound according to claim 2, wherein R<sup>8</sup> is selected from the group of C<sub>1</sub>–C<sub>4</sub> alkyl, C<sub>1</sub>–C<sub>4</sub> heteroalkyl, C<sub>1</sub>–C<sub>4</sub> haloalkyl, C<sub>2</sub>–C<sub>4</sub> alkenyl, C<sub>2</sub>–C<sub>4</sub> heteroalkenyl, C<sub>2</sub>–C<sub>4</sub> haloalkenyl, C<sub>2</sub>–C<sub>4</sub> alkynyl, C<sub>2</sub>–C<sub>4</sub> heteroalkynyl, and C<sub>2</sub>–C<sub>4</sub> haloalkynyl.

4. (original) A compound according to claim 2, wherein R<sup>8</sup> is selected from the group of aryl and heteroaryl radicals, wherein said aryl and heteroaryl radicals are optionally substituted with one or more substituents independently selected from the group of hydrogen, C<sub>1</sub>–C<sub>4</sub> alkyl, F, Cl, Br, CN, NH<sub>2</sub>, NHCH<sub>3</sub>, N(CH<sub>3</sub>)<sub>2</sub>, SH, SCH<sub>3</sub>, OH, OCH<sub>3</sub>, OCF<sub>3</sub>, CF<sub>3</sub>, C(O)CH<sub>3</sub>, OR<sup>10</sup>, SR<sup>10</sup>, and NR<sup>10</sup>R<sup>11</sup>.

5. (original) A compound according to claim 2, wherein R<sup>8</sup> is selected from the group of



$R^1$  and  $R^2$  each independently is selected from the group of hydrogen, F, Cl, Br and  $C_1-C_4$  alkyl;

$R^3$  through  $R^5$  each independently is selected from group of hydrogen, F, Cl, and  $C_1-C_4$  alkyl;

$n$  is 0 or 1; and

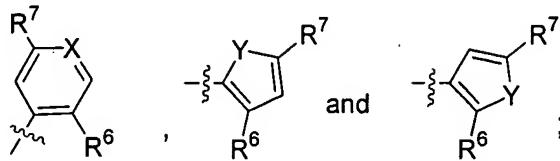
$Y$  is selected from the group of O, S, and  $NR^{10}$ .

6. (original) A compound according to claim 1, wherein  $R^9$  is selected from the group of hydrogen, F, Cl, Br, CN,  $C_1-C_6$  alkyl,  $C_1-C_6$  heteroalkyl,  $C_1-C_6$  haloalkyl,  $C_2-C_6$  alkenyl or cycloalkenyl,  $C_2-C_6$  heteroalkenyl,  $C_2-C_6$  haloalkenyl,  $C_2-C_6$  alkynyl,  $C_2-C_6$  heteroalkynyl,  $C_2-C_6$  haloalkynyl, aryl and heteroaryl optionally substituted with one or more substituents independently selected from the group of hydrogen,  $C_1-C_4$  alkyl, F, Cl, Br, I, CN,  $NO_2$ ,  $NH_2$ ,  $NHCH_3$ ,  $N(CH_3)_2$ , SH,  $SCH_3$ , OH,  $OCH_3$ ,  $OCF_3$ ,  $CF_3$ ,  $C(O)CH_3$ ,  $CO_2CH_3$ ,  $C(O)NH_2$ ,  $OR^{10}$ ,  $SR^{10}$ , and  $NR^{10}R^{11}$ .

7. (original) A compound according to claim 6, wherein  $R^9$  is selected from the group of hydrogen, Br, Cl,  $C_1-C_4$  alkyl,  $C_1-C_4$  heteroalkyl,  $C_1-C_4$  haloalkyl,  $C_2-C_4$  alkenyl,  $C_2-C_4$  heteroalkenyl,  $C_2-C_4$  haloalkenyl,  $C_2-C_4$  alkynyl and  $C_2-C_4$  heteroalkynyl,  $C_2-C_4$  haloalkynyl.

8. (original) A compound according to claim 6, wherein  $R^9$  is selected from the group of aryl and heteroaryl radicals, wherein said aryl and heteroaryl radicals are optionally substituted with one or more substituents independently selected from the group of hydrogen,  $C_1-C_4$  alkyl, F, Cl, Br, CN,  $NH_2$ ,  $NHCH_3$ ,  $N(CH_3)_2$ , SH,  $SCH_3$ , OH,  $OCH_3$ ,  $OCF_3$ ,  $OR^{10}$ ,  $SR^{10}$ , and  $NR^{10}R^{11}$ .

9. (original) A compound according to claim 6, wherein R<sub>9</sub> is selected from the group of



R<sup>6</sup> is selected from the group of hydrogen, F, Cl, Br, C<sub>1</sub>–C<sub>4</sub> alkyl, OR<sup>10</sup>, SR<sup>10</sup>, and NR<sup>10</sup>R<sup>11</sup>;

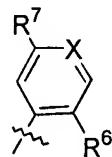
R<sup>7</sup> is hydrogen, F, or Cl;

R<sup>10</sup> and R<sup>11</sup> each independently is hydrogen, or C<sub>1</sub>–C<sub>4</sub> alkyl;

X is CH or N; and

Y is selected from the group of O, S, and NR<sup>10</sup>.

10. (original) A compound according to claim 9, wherein R<sup>9</sup> is



R<sup>6</sup> is selected from the group of hydrogen, F, Cl, C<sub>1</sub>–C<sub>4</sub> alkyl, OMe, OEt, NHMe, and NMe<sub>2</sub>;

R<sup>7</sup> is hydrogen, F, or Cl; and

X is CH or N.

11. (original) A compound according to claim 9, where R<sup>6</sup> is selected from the group of F, Me, Et, OMe, OEt, SMe, and NMe<sub>2</sub>.

12. (original) A compound according to claim 1, wherein said compound is selected from the group of:

7,9-difluoro-5(*Z*)-benzylidene-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 10);

7,9-difluoro-5(*Z*)-(2-fluorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 12);

7,9-difluoro-5(*Z*)-(2-chlorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 13);

7,9-difluoro-5(*Z*)-(4-picolylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 14);

7,9-difluoro-5(*Z*)-(3-fluorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 15);

7,9-difluoro-5(*Z*)-(4-fluorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 16);

7,9-difluoro-5(*Z*)-(2,5-difluorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 17);

7,9-difluoro-5(*Z*)-(2-methoxybenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 18);

7,9-difluoro-5(*Z*)-(2-methyl-5-fluorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 19);

7,9-difluoro-5(*Z*)-(3-methyl-4-picolylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 20);

7,9-difluoro-5(*Z*)-(2-methyl-3-fluorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 21);

7,9-difluoro-5(*Z*)-(3-methyl-2-picolylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 22);

7,9-difluoro-5(*Z*)-(2,3-dimethylbenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 23);

7,9-difluoro-5(*Z*)-cyanomethylidene-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 24);

7,9-difluoro-5(*Z*)-hexylidene-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 25);

7,9-difluoro-5(*Z*)-(2-methoxy-5-fluorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 26);

7,9-difluoro-5(*Z*)-(2,4,5-trifluorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 27);

7,9-difluoro-5-methylidene-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 28);

7,9-difluoro-5(*Z*)-bromomethylidene-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 29);

7,9-difluoro-5(*Z*)-(3-thienylmethylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 30);

7,9-difluoro-5(*Z*)-(2-thienylmethylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 31);

( $\pm$ )-7,9-difluoro-5-methoxy-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 32);

( $\pm$ )-7,9-difluoro-5-phenyl-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 33);

( $\pm$ )-7,9-difluoro-5-(3-methylphenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 34);

( $\pm$ )-7,9-difluoro-5-(1,3-benzodioxol-5-yl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 35);

( $\pm$ )-7,9-difluoro-5-(4-bromophenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 36);

( $\pm$ )-7,9-difluoro-5-(4-chloro-3-methylphenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 37);

(-)-7,9-difluoro-5-(4-chloro-3-methylphenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 38);

(+)-7,9-difluoro-5-(4-chloro-3-methylphenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 39);

( $\pm$ )-7,9-difluoro-5-(3-fluorophenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 40);

( $\pm$ )-7,9-difluoro-5-(3-chlorophenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 41);

( $\pm$ )-7,9-difluoro-5-(3-bromophenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 42);

( $\pm$ )-7,9-difluoro-5-(4-chlorophenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 43);

( $\pm$ )-7,9-difluoro-1,2-dihydro-2,2,4,5-tetramethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 44);

( $\pm$ )-7,9-difluoro-5-(2-oxo-2-phenylethyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 45);

( $\pm$ )-7,9-difluoro-5-ethyl-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 46);

( $\pm$ )-7,9-difluoro-5-ethenyl-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline  
(Compound 47);

( $\pm$ )-7,9-difluoro-5-(2-oxo-3-butenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 48);

( $\pm$ )-7,9-difluoro-1,2-dihydro- $\alpha,\alpha,2,2,4$ -pentamethyl-5*H*-chromeno[3,4-*f*]quinoline-5-ethanoate (Compound 49);

( $\pm$ )-7,9-difluoro-5-ethynyl-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline  
(Compound 50);

( $\pm$ )-7,9-difluoro-5-cyano-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline  
(Compound 51);

( $\pm$ )-7,9-difluoro-5-butyl-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline  
(Compound 52);

( $\pm$ )-7,9-difluoro-5-(2-thienyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline  
(Compound 53);

( $\pm$ )-7,9-difluoro-5-(2-furyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline  
(Compound 54);

( $\pm$ )-7,9-difluoro-5-allyl-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline  
(Compound 55);

( $\pm$ )-7,9-difluoro-5-[3-(trifluoromethyl)phenyl]-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 56);

Ethyl ( $\pm$ )-7,9-difluoro-1,2-dihydro- $\alpha$ -methylene-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline-5-propanoate (Compound 57);

( $\pm$ )-7,9-difluoro-1,2-dihydro- $\beta$ -methylene-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline-5-propanol (Compound 58);

( $\pm$ )-7,9-difluoro-1,2-dihydro- $\beta$ -methylene-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline-5-propanol acetate(Compound **59**);

( $\pm$ )-7,9-difluoro-5-(1-methylethenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **60**);

( $\pm$ )-7,9-difluoro-5-(N-methyl-2-pyrrolyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **61**);

( $\pm$ )-7,9-difluoro-5-phenylethynyl-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **62**);

( $\pm$ )-7,9-difluoro-5-(benzo[b]thien-2-yl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **63**);

(-)-7,9-difluoro-5-(benzo[b]thien-2-yl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **64**);

(+)-7,9-difluoro-5-(benzo[b]thie-2yl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **65**);

( $\pm$ )-7,9-difluoro-5-(5-methyl-2-furyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **66**);

( $\pm$ )-7,9-difluoro-5-(2-benzo[b]furyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **67**);

( $\pm$ )-7,9-difluoro-5-[4-(dimethylamino)phenyl]-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **68**);

( $\pm$ )-7,9-difluoro-5-(5-methyl-2-thienyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **69**);

( $\pm$ )-7,9-difluoro-5-(5-methoxy-2-furyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **70**);

( $\pm$ )-7,9-difluoro-5-(2-propynyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **71**);

(-)-7,9-difluoro-5-(2-propynyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **72**);

(+)-7,9-difluoro-5-(2-propynyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **73**);

( $\pm$ )-7,9-difluoro-5-(1-propynyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **74**);

(-)-7,9-difluoro-5-(1-propynyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **75**);

(+)-7,9-difluoro-5-(1-propynyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **76**);

( $\pm$ )-7,9-difluoro-5-(4,5-dimethyl-2-furyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **77**);

( $\pm$ )-7,9-difluoro-5-(2-methyl-1-propenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **78**);

( $\pm$ )-7,9-difluoro-5-(3,4-dimethyl-2-thienyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **79**);

( $\pm$ )-7,9-difluoro-5-(3-(3-bromophenyl)phenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **80**); and

7,9-difluoro-5-(2-methylbenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **81**).

13. (original) A compound according to claim 1, wherein said compound is selected from the group of:

7,9-difluoro-5(*Z*)-benzylidene-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline

(Compound 10);

7,9-difluoro-5(*Z*)-(2-fluorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 12);

7,9-difluoro-5(*Z*)-(3-fluorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 15);

7,9-difluoro-5(*Z*)-(2,5-difluorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 17);

7,9-difluoro-5(*Z*)-(2-methoxybenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 18);

7,9-difluoro-5(*Z*)-(2-methyl-5-fluorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 19);

7,9-difluoro-5(*Z*)-(3-methyl-4-picolylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 20);

7,9-difluoro-5(*Z*)-(2-methoxy-5-fluorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 26);

7,9-difluoro-5(*Z*)-(3-thienylmethylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 30);

7,9-difluoro-5(*Z*)-(2-thienylmethylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 31);

( $\pm$ )-7,9-difluoro-5-(3-methylphenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 34);

(-)-7,9-difluoro-5-(4-chloro-3-methylphenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 38);

(±)-7,9-difluoro-5-(3-chlorophenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 41);

(±)-7,9-difluoro-1,2-dihydro-2,2,4,5-tetramethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 44);

(±)-7,9-difluoro-5-allyl-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 55);

(±)-7,9-difluoro-5-(3-trifluoromethylphenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 56);

(±)-7,9-difluoro-5-(benzo[b]thien-2-yl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 63);

(-)-7,9-difluoro-5-(benzo[b]thien-2-yl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 64);

(+)-7,9-difluoro-5-(benzo[b]thien-2-yl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 65);

(-)-7,9-difluoro-5-(2-propynyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 72);

(-)-7,9-difluoro-5-(1-propynyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 75); and

7,9-difluoro-5-(2-methylbenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 81).

14. (original) A compound according to claim 1, wherein said compound is selected from the group of:

7,9-difluoro-5(*Z*)-(2,5-difluorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 17);

7,9-difluoro-5(*Z*)-(2-methyl-5-fluorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 19);

7,9-difluoro-5(*Z*)-(3-methyl-4-picolylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 20);

7,9-difluoro-5(*Z*)-(2-methoxy-5-fluorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 26);

(-)-7,9-difluoro-5-(4-chloro-3-methylphenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 38);

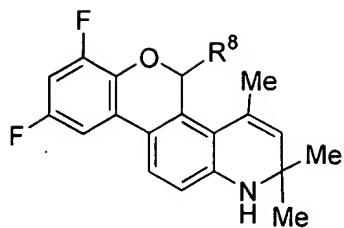
(±)-7,9-difluoro-5-(benzo[b]thien-2-yl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 63);

(-)-7,9-difluoro-5-(benzo[b]thien-2-yl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 64);

(+)-7,9-difluoro-5-(benzo[b]thien-2-yl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 65); and

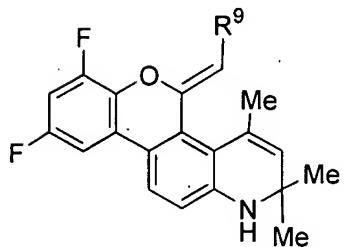
(-)-7,9-difluoro-5-(2-propynyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 72).

15. (original) A pharmaceutical composition comprising a pharmaceutically acceptable carrier and a compound of formula:



(I)

or



(II)

wherein:

$R^8$  is selected from the group of  $C_1$ – $C_{12}$  alkyl,  $C_1$ – $C_{12}$  heteroalkyl,  $C_1$ – $C_{12}$  haloalkyl,  $C_2$ – $C_{12}$  alkenyl,  $C_2$ – $C_{12}$  heteroalkenyl,  $C_2$ – $C_{12}$  haloalkenyl,  $C_2$ – $C_{12}$  alkynyl,  $C_2$ – $C_{12}$  heteroalkynyl,  $C_2$ – $C_{12}$  haloalkynyl, aryl and heteroaryl optionally substituted with one or more substituents independently selected from the group of hydrogen,  $C_1$ – $C_4$  alkyl, F, Cl, Br, I, CN,  $NO_2$ ,  $NH_2$ ,  $NHCH_3$ ,  $N(CH_3)_2$ , SH,  $SCH_3$ , OH,  $OCH_3$ ,  $OCF_3$ ,  $CF_3$ ,  $C(O)CH_3$ ,  $CO_2CH_3$ ,  $C(O)NH_2$ ,  $OR^{10}$ ,  $SR^{10}$ , and  $NR^{10}R^{11}$ ;

$R^9$  is selected from the group of hydrogen, F, Cl, Br, I, CN,  $C_1$ – $C_8$  alkyl,  $C_1$ – $C_8$  heteroalkyl,  $C_1$ – $C_8$  haloalkyl,  $C_2$ – $C_8$  alkenyl or cycloalkenyl,  $C_2$ – $C_8$  heteroalkenyl,  $C_2$ – $C_8$  haloalkenyl,  $C_2$ – $C_8$  alkynyl,  $C_2$ – $C_8$  heteroalkynyl,  $C_2$ – $C_8$  haloalkynyl, aryl and heteroaryl optionally substituted with one or more substituents independently selected from the group of hydrogen,  $C_1$ – $C_4$  alkyl, F, Cl, Br, I, CN,  $NO_2$ ,  $NH_2$ ,  $NHCH_3$ ,  $N(CH_3)_2$ , SH,  $SCH_3$ , OH,  $OCH_3$ ,  $OCF_3$ ,  $CF_3$ ,  $C(O)CH_3$ ,  $CO_2CH_3$ ,  $C(O)NH_2$ ,  $OR^{10}$ ,  $SR^{10}$ , and  $NR^{10}R^{11}$ ;

R<sup>10</sup> and R<sup>11</sup> each independently is hydrogen, or C<sub>1</sub>–C<sub>4</sub> alkyl;

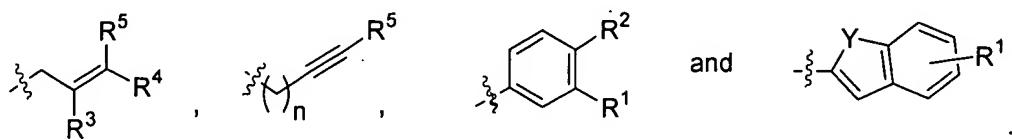
or a pharmaceutically acceptable salt or prodrug thereof.

16. (original) A pharmaceutical composition according to claim 15, wherein R<sup>8</sup> is selected from the group of C<sub>1</sub>–C<sub>8</sub> alkyl, C<sub>1</sub>–C<sub>8</sub> heteroalkyl, C<sub>1</sub>–C<sub>8</sub> haloalkyl, C<sub>2</sub>–C<sub>8</sub> alkenyl, C<sub>2</sub>–C<sub>8</sub> heteroalkenyl, C<sub>2</sub>–C<sub>8</sub> haloalkenyl, C<sub>2</sub>–C<sub>8</sub> alkynyl, C<sub>2</sub>–C<sub>8</sub> heteroalkynyl, C<sub>2</sub>–C<sub>8</sub> haloalkynyl, aryl and heteroaryl, optionally substituted with one or more substituents independently selected from the group of hydrogen, C<sub>1</sub>–C<sub>4</sub> alkyl, F, Cl, Br, I, CN, NO<sub>2</sub>, NH<sub>2</sub>, NHCH<sub>3</sub>, N(CH<sub>3</sub>)<sub>2</sub>, SH, SCH<sub>3</sub>, OH, OCH<sub>3</sub>, OCF<sub>3</sub>, CF<sub>3</sub>, C(O)CH<sub>3</sub>, CO<sub>2</sub>CH<sub>3</sub>, C(O)NH<sub>2</sub>, OR<sup>10</sup>, SR<sup>10</sup>, and NR<sup>10</sup>R<sup>11</sup>.

17. (original) A pharmaceutical composition according to claim 16, wherein R<sup>8</sup> is selected from the group of C<sub>1</sub>–C<sub>4</sub> alkyl, C<sub>1</sub>–C<sub>4</sub> heteroalkyl, C<sub>1</sub>–C<sub>4</sub> haloalkyl, C<sub>2</sub>–C<sub>4</sub> alkenyl, C<sub>2</sub>–C<sub>4</sub> heteroalkenyl, C<sub>2</sub>–C<sub>4</sub> haloalkenyl, and C<sub>2</sub>–C<sub>4</sub> alkynyl, C<sub>2</sub>–C<sub>4</sub> heteroalkynyl and C<sub>2</sub>–C<sub>4</sub> haloalkynyl.

18. (original) A pharmaceutical composition according to claim 16, wherein R<sup>8</sup> is selected from the group of aryl and heteroaryl radicals, wherein said aryl and heteroaryl radicals are optionally substituted with one or more substituents independently selected from the group of hydrogen, C<sub>1</sub>–C<sub>4</sub> alkyl, F, Cl, Br, CN, NH<sub>2</sub>, NHCH<sub>3</sub>, N(CH<sub>3</sub>)<sub>2</sub>, SH, SCH<sub>3</sub>, OH, OCH<sub>3</sub>, OCF<sub>3</sub>, CF<sub>3</sub>, C(O)CH<sub>3</sub>, OR<sup>10</sup>, SR<sup>10</sup>, and NR<sup>10</sup>R<sup>11</sup>.

19. (original) A pharmaceutical composition according to claim 16, wherein R<sup>8</sup> is selected from the group of



R<sup>1</sup> and R<sup>2</sup> each independently is selected from the group of hydrogen, F, Cl, Br and C<sub>1</sub>–C<sub>4</sub> alkyl;

$R^3$  through  $R^5$  each independently is selected from the group of hydrogen, F, Cl, and  $C_1-C_4$  alkyl;

$n$  is 0 or 1; and

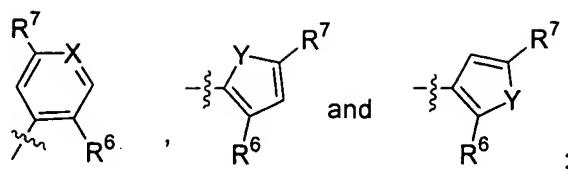
$Y$  is selected from the group of O, S, and  $NR^{10}$ .

20. (original) A pharmaceutical composition according to claim 15, wherein  $R^9$  is selected from the group of hydrogen, F, Cl, Br, CN,  $C_1-C_6$  alkyl,  $C_1-C_6$  heteroalkyl,  $C_1-C_6$  haloalkyl,  $C_2-C_6$  alkenyl or cycloalkenyl,  $C_2-C_6$  heteroalkenyl,  $C_2-C_6$  haloalkenyl,  $C_2-C_6$  alkynyl,  $C_2-C_6$  heteroalkynyl,  $C_2-C_6$  haloalkynyl, aryl and heteroaryl, optionally substituted with one or more substituents independently selected from the group of hydrogen,  $C_1-C_4$  alkyl, F, Cl, Br, I, CN,  $NO_2$ ,  $NH_2$ ,  $NHCH_3$ ,  $N(CH_3)_2$ , SH,  $SCH_3$ , OH,  $OCH_3$ ,  $OCF_3$ ,  $CF_3$ ,  $C(O)CH_3$ ,  $CO_2CH_3$ ,  $C(O)NH_2$ ,  $OR^{10}$ ,  $SR^{10}$ , and  $NR^{10}R^{11}$ .

21. (original) A pharmaceutical composition according to claim 20, wherein  $R^9$  is selected from the group of hydrogen, Br, Cl,  $C_1-C_4$  alkyl,  $C_1-C_4$  heteroalkyl,  $C_1-C_4$  haloalkyl,  $C_2-C_4$  alkenyl,  $C_2-C_4$  heteroalkenyl,  $C_2-C_4$  haloalkenyl,  $C_2-C_4$  alkynyl,  $C_2-C_4$  heteroalkynyl, and  $C_2-C_4$  haloalkynyl.

22. (original) A pharmaceutical composition according to claim 20, wherein  $R^9$  is selected from the group of aryl and heteroaryl radicals, wherein said aryl and heteroaryl radicals are optionally substituted with one or more substituents independently selected from the group of hydrogen,  $C_1-C_4$  alkyl, F, Cl, Br, CN,  $NH_2$ ,  $NHCH_3$ ,  $N(CH_3)_2$ , SH,  $SCH_3$ , OH,  $OCH_3$ ,  $OCF_3$ ,  $OR^{10}$ ,  $SR^{10}$ , and  $NR^{10}R^{11}$ .

23. (original) A pharmaceutical composition according to claim 22, wherein  $R^9$  is selected from the group of



$R^6$  is selected from the group of hydrogen, F, Cl, Br,  $C_1$ – $C_4$  alkyl,  $OR^{10}$ ,  $SR^{10}$ , and  $NR^{10}R^{11}$ ;

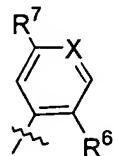
$R^7$  is hydrogen, F, or Cl;

$R^{10}$  and  $R^{11}$  each independently is hydrogen, or  $C_1$ – $C_4$  alkyl;

X is CH or N; and

Y is selected from group of O, S, and  $NR^{10}$ .

24. (original) A pharmaceutical composition according to claim 23, wherein  $R^9$  is



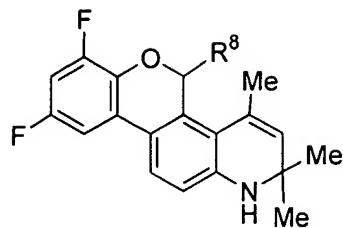
$R^6$  is selected from the group of hydrogen, F, Cl,  $C_1$ – $C_4$  alkyl, OMe, OEt, NHMe, and  $NMe_2$ ; and

$R^7$  is hydrogen, F, or Cl.

25. (original) A pharmaceutical composition according to claim 23, where  $R^6$  is selected from the group of F, Me, Et, OMe, OEt, SMe, and  $NMe_2$ .

26. (currently amended) A method of treating an individual having a condition mediated by a progesterone receptor comprising administering to said individual a pharmaceutically effective amount of a compound according to ~~any one of~~ claims 1 to 14.

27. (original) A method according to claim 26, wherein said compound is represented by formula (I):



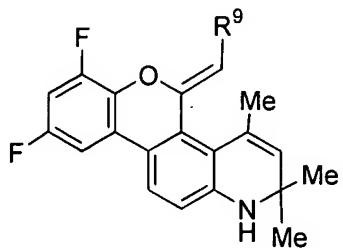
(I)

wherein:

$R^8$  is selected from the group of  $C_1-C_{12}$  alkyl,  $C_1-C_{12}$  heteroalkyl,  $C_1-C_{12}$  haloalkyl,  $C_2-C_{12}$  alkenyl,  $C_2-C_{12}$  heteroalkenyl,  $C_2-C_{12}$  haloalkenyl,  $C_2-C_{12}$  alkynyl,  $C_2-C_{12}$  heteroalkynyl,  $C_2-C_{12}$  haloalkynyl, aryl and heteroaryl, optionally substituted with one or more substituents independently selected from the group of hydrogen,  $C_1-C_4$  alkyl, F, Cl, Br, I, CN,  $NO_2$ ,  $NH_2$ ,  $NHCH_3$ ,  $N(CH_3)_2$ , SH,  $SCH_3$ , OH,  $OCH_3$ ,  $OCF_3$ ,  $CF_3$ ,  $C(O)CH_3$ ,  $CO_2CH_3$ ,  $C(O)NH_2$ ,  $OR^{10}$ ,  $SR^{10}$ , and  $NR^{10}R^{11}$ ;

or a pharmaceutically acceptable salt or prodrug thereof.

28. (original) A method according to claim 26, wherein said compound is represented by formula (II):



(II)

wherein:

$R^9$  is selected from the group of hydrogen, F, Cl, Br, I, CN,  $C_1-C_8$  alkyl,  $C_1-C_8$  heteroalkyl,  $C_1-C_8$  haloalkyl,  $C_2-C_8$  alkenyl or cycloalkenyl,  $C_2-C_8$  heteroalkenyl,  $C_2-C_8$

haloalkenyl, C<sub>2</sub>–C<sub>8</sub> alkynyl, C<sub>2</sub>–C<sub>8</sub> heteroalkynyl, C<sub>2</sub>–C<sub>8</sub> haloalkynyl, aryl and heteroaryl, optionally substituted with one or more substituents independently selected from the group of hydrogen, C<sub>1</sub>–C<sub>4</sub> alkyl, F, Cl, Br, I, CN, NO<sub>2</sub>, NH<sub>2</sub>, NHCH<sub>3</sub>, N(CH<sub>3</sub>)<sub>2</sub>, SH, SCH<sub>3</sub>, OH, OCH<sub>3</sub>, OCF<sub>3</sub>, CF<sub>3</sub>, C(O)CH<sub>3</sub>, CO<sub>2</sub>CH<sub>3</sub>, C(O)NH<sub>2</sub>, OR<sup>10</sup>, SR<sup>10</sup>, and NR<sup>10</sup>R<sup>11</sup>; or a pharmaceutically acceptable salt or prodrug thereof.

29. (original) A method according to claim 26, wherein said condition is selected from the group of dysfunctional uterine bleeding, dysmenorrhea, endometriosis, leiomyomas (uterine fibroids), hot flushes, mood disorders, meningiomas, hormone-dependent cancers, and female osteoporosis.

30. (currently amended) A method of modulating fertility in an individual comprising administering to said individual a pharmaceutically effective amount of a compound according to ~~any one of claims 1 to 25 or 15~~.

31. (currently amended) A method of providing contraception in an individual comprising administering to said individual a pharmaceutically effective amount of a compound according to ~~any one of claims 1 to 25 or 15~~.

32. (original) A method according to claim 26, wherein said condition is alleviated with female hormone replacement therapy.

33. (currently amended) A method of modulating a progesterone receptor in an individual comprising administering a progesterone modulating effective amount of a compound according to ~~any one of claims 1 to 25 or 15~~.

34. (original) A method according to claim 33, wherein said modulation is activation.

35. (original) A method according to claim 34, wherein said compound provides at least 50% maximal activation of the progesterone receptor at a blood plasma concentration of less than 100 nM.

36. (original) A method according to claim 34, wherein said compound provides at least 50% maximal activation of the progesterone receptor at a blood plasma concentration of less than 50 nM.

37. (original) A method according to claim 34, wherein said compound provides at least 50% maximal activation of the progesterone receptor at a blood plasma concentration of less than 20 nM.

38. (original) A method according to claim 34, wherein said compound provides at least 50% maximal activation of the progesterone receptor at a blood plasma concentration of less than 10 nM.

39. (currently amended) A method of treating an individual having cancer comprising administering to said individual a pharmaceutically effective amount of a compound according to ~~any one of claims 1 to 25 or 15.~~

40. (currently amended) A method of determining the presence of a progesterone receptor in a cell or cell extract comprising (a) labeling a compound according to claims according to ~~any one of claims 1 to 25 or 15~~; (b) contracting the cell or cell extract with said labeled compound; and (c) testing the contracted cell or cell extract to determine the presence of progesterone receptor.